Claim Amendments

Claims 1 - 137 (canceled)

138. (new) A method of operating a touch-screen display system that includes a first resistive screen extending between a first bus bar and a second bus bar, and a second resistive screen extending between a third bus bar and a fourth bus bar, wherein the first resistive screen overlaps the second resistive screen to define an active area of the touch-screen display, the method comprising:

during a first period and during a second period, touching the first resistive screen to the second resistive screen in the active area of the touch-screen display, wherein the first period and the second period are two distinct periods;

during the first period, applying a first voltage reference signal to the first bus bar;

during the first period, creating a first ground reference at the second bus bar such that the first voltage signal and the first ground reference creates a first varying voltage potential across the first resistive screen during the first period;

during the first period, sampling the first varying voltage potential via at least one of the third bus bar and the fourth bus bar;

determining an Xraw value based upon sampling the first varying voltage potential;

during the second period, applying a second voltage reference signal to the third bus bar;

during the second period, creating a second ground reference at the fourth bus bar such that the second voltage signal and the second ground reference creates a second varying voltage potential across the second resistive screen during the second period;

during the second period, sampling the second varying voltage potential via at least one of the first bus bar and the second bus bar; and

determining a Yraw value based upon sampling the second varying voltage potential.

139. (new) The method of claim 138, further comprising:

determining an Xmax value based on the first voltage reference signal;

determining an Xmin value based on the first ground reference; and

determining an X-pixel location based on the Xraw value, the Xmin value, and the Xmax value.

140. (new) The method of claim 139, further comprising:

comparing the Xmax value to the Xmin value;

comparing the Xraw value to at least one of the Xmax value and the Xmin value; and

determining an X-pixel location based on comparing the Xmax value to the Xmin value and comparing the Xraw value to at least one of the Xmax value and the Xmin value.

141. (new) The method of claim 138, further comprising:

sampling the first varying voltage potential via at least one of the third bus bar and the fourth bus bar and doing so a plurality of times during the first period to acquire a plurality of samples;

determining whether the plurality of samples are within a predetermined threshold value of each other; and

if the plurality of samples are within a predetermined threshold value of each other, determining a valid X-axis pixel coordinate based on at least one of the plurality of samples.

142. (new) The method of claim 138, wherein the first resistive screen extends a lead-in distance beyond the active area, and further comprising determining at an X-pixel location based at least partially on the Xraw value and the lead-in distance.

143. (new) A method of operating a touch-screen display system that includes a first resistive screen extending between a first bus bar and a second bus bar, and a second resistive screen extending between a

third bus bar and a fourth bus bar, wherein the first resistive screen overlaps the second resistive screen to define an active area of the touch-screen display, the method comprising:

during a first period and during a second period, touching the first resistive screen to the second resistive screen in the active area of the touch-screen display, wherein the first period and the second period are two distinct periods;

during the first period, applying a first voltage reference signal to the first bus bar;

during the first period, creating a first ground reference at the second bus bar such that the first voltage signal and the first ground reference creates a first varying voltage potential across the first resistive screen during the first period;

during the first period, sampling the first varying voltage potential via at least one of the third bus bar and the fourth bus bar;

determining an Xraw value based upon sampling the first varying voltage potential;

determining an Xmax value based on the first voltage reference signal;

determining an Xmin value based on the first ground reference;

determining an X-pixel location based on the Xraw value, the Xmin value, and the Xmax value;

during the second period, applying a second voltage reference signal to the third bus bar;

during the second period, creating a second ground reference at the fourth bus bar such that the second voltage signal and the second ground reference creates a second varying voltage potential across the second resistive screen during the second period;

during the second period, sampling the second varying voltage potential via at least one of the first bus bar and the second bus bar;

determining a Yraw value based upon sampling the second varying voltage potential;

determining a Ymax value based on the second voltage reference signal;

determining a Y-min value based on the second ground reference; and

determining a Y-pixel location based on the Yraw value, the Ymin value, and the Ymax value.

144. (new) The method of claim 143, further comprising:

comparing the Xmax value to the Xmin value;

comparing the Xraw value to at least one of the Xmax value and the Xmin value; and

determining an X-pixel location based on comparing the Xmax value to the Xmin value and comparing the Xraw value to at least one of the Xmax value and the Xmin value.

145. (new) The method of claim 143, further comprising:

sampling the first varying voltage potential via at least one of the third bus bar and the fourth bus bar and doing so a plurality of times during the first period to acquire a plurality of samples;

determining whether the plurality of samples are within a predetermined threshold value of each other; and

if the plurality of samples are within a predetermined threshold value of each other, determining a valid X-axis pixel coordinate based on at least one of the plurality of samples.

146. (new) The method of claim 143, wherein the first resistive screen extends a lead-in distance beyond the active area, and further comprising determining at an X-pixel location based at least partially on the Xraw value and the lead-in distance.